



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,313	09/10/2004	Jui-Hsing Tseng	MTKP0186USA	5312
27765	7590	02/21/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			NGUYEN, LINH M	
P.O. BOX 506			ART UNIT	PAPER NUMBER
MERRIFIELD, VA 22116			2816	

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/711,313	Applicant(s) TSENG, JUI-HSING	
	Examiner Linh M. Nguyen	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 8-10 and 18-20 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 is/are allowed.
- 6) ☒ Claim(s) 1,4-7,11,14-17 and 22 is/are rejected.
- 7) ☒ Claim(s) 2,3,12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2816

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I, claims 1-7 and 11-17 is acknowledged. The claims of Group II, claims 8-10 and 18-20, are therefore withdrawn from consideration. Additionally, applicant added generic claims 21 and 22, which are also considered.

Claim Objections/Minor Informalities

1. Claim 22 is objected to because of the following informalities:

Line 2, it is suggested to change "reference" (second occurrence) to --frequency-divided-- since it is the frequency-divided clock, which is being, delayed not the reference clock.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2816

3. Claims 1, 4-7, 11, 14-17 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Harrison (U.S. Patent No. 6,842,399).

With respect to claims 1, 11 and 22, Harrison discloses, in Fig. 8, a delay lock loop circuit and its corresponding method for delaying a reference clock to lock a delayed clock the delay lock loop circuit comprising a clock divider [142] for dividing a frequency of the reference clock [141] by N to generate a frequency-divided clock; a programmable delay circuit [144, 146] electrically coupled to the clock divider, the programmable delay circuit for delaying the frequency-divided clock to generate the delayed clock; a 180° phase detector [154] electrically coupled to the programmable delay circuit, the 180° phase detector for detecting a phase change of the delayed clock; and a delay lock loop controller [164, 168] electrically coupled to the programmable delay circuit and the 180° phase detector, the delay lock loop controller for programming the programmable delay circuit to lock the delayed clock according to the phase change.

With respect to claims 4 and 14, Harrison discloses, in Fig. 8, that a driving clock of the 180° phase detector is the frequency-divided clock.

With respect to claims 5 and 15, Harrison discloses, in Fig. 8, that the 180° phase detector is triggered once each cycle of the frequency-divided clock.

With respect to claims 6 and 16, Harrison discloses, in Fig. 8, that a driving clock of the 180° phase detector is the reference clock.

With respect to claims 7 and 17, Harrison discloses, in Fig. 8, that the 180° phase detector is triggered once every N cycles of the reference clock.

Art Unit: 2816

Allowable Subject Matter

4. Claim 21 is allowed.
5. Claims 2-3 and 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter.

The closest prior art on record does not show or fairly suggest:

- a) A delay locked loop including a multiplexer electrically coupled to the clock divider and the reference clock, the multiplexer sends either the reference clock or the frequency-divided clock as the driving clock to the 180° phase detector, as called for in claims 2 and 12; and
- b) A delay locked loop, in which the delay controller is for programming the clock divider, in combination with the remaining limitations, as called for in independent claim 21.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The reference of Schmidt (U.S. Patent No. 5,838,179) discloses a clock compensation circuit including phase detector, clock tree, controller and programmable delay logic.

Inquiry

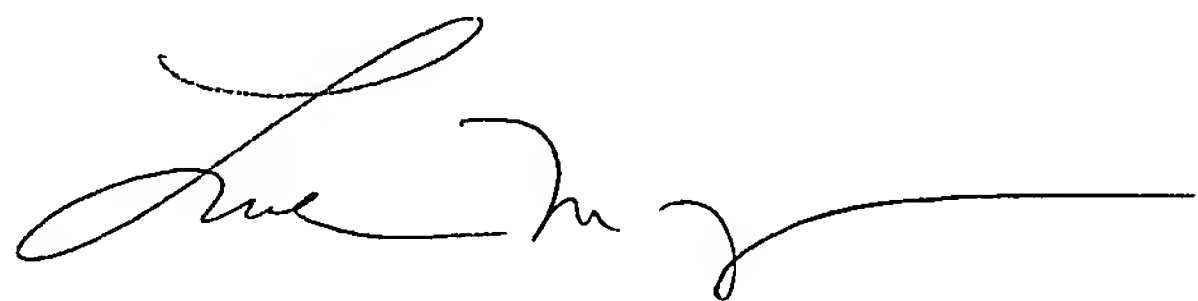
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749. The examiner can normally be reached on Alternate Fri, Monday - Thursday from 7:00 to 4:30.

Art Unit: 2816

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh M. Nguyen
Primary Examiner
Art Unit 2816

A handwritten signature in black ink, appearing to read 'Linh M. Nguyen', with a long horizontal flourish extending to the right.